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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,708	10/02/2003	Jerry H. Stoller	SOR028/189241	9195

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EXAMINER	
PRYOR, ALTON NATHANIEL	
ART UNIT	**PAPER NUMBER**
1616	

NOTIFICATION DATE	DELIVERY MODE
08/04/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pat-tmk@andrewskurth.com

Office Action Summary	Application No.	Applicant(s)	
	10/677,708	STOLLER, JERRY H.	
	Examiner	Art Unit	
	ALTON N. PRYOR	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 June 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5-13,16-18,20,21,25-31,33-43,45 and 47-75* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5-13,16-18,20,21,25-31,33-43,45 and 47-75* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/29/10*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant's arguments filed 6/8/10 have been fully considered but they are not persuasive. Previous rejections not addressed below are withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1,5-13,16-18,20,21,25-31,33-43,45,47-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clough (USPN 4496388; 1/29/85) and Himel et al. (US 4286020; 8/25/81). Clough teaches a fungicidal composition comprising metal complex of the compound of formula I (abstract, column 6 lines 14-18). Clough teaches that the composition can comprise additional compounds such as auxins including indoleacetic acid, indole butyric acid, and naphthyacetic acid (column 11 lines 7-39), anionic surfactants including calcium lignosulphonate (column 10 lines 1-18) as well as ingredients such as calcium carbonate (column 9 lines 3-19) Clough teaches that the composition can exist in many forms including aqueous dispersions (column 9 lines 25-68) and as a microcapsule (column 9 lines 45-46). Clough teaches a method of controlling fungi such as phytophthora and rhizoctonia (column 6 lines 39-50) growth on plants such as coffee beans, soya beans and potatoes, i.e. monocots and dicots (column 6 lines 19-36, lines 55-66, column 7 lines 41-64), by applying the composition onto plants and/or their seeds. Clough does not exemplify an invention of controlling

fungi by applying a composition comprising metal complex of the compound of formula I, indoleacetic acid, indole butyric acid and calcium lignosulphonate onto plants and/or their seeds. Clough does not teach disclose the microencapsulation involves a resin. However, it would have been obvious to arrive at such an invention since Clough suggests the combination of ingredients to be applied to plants and/or their seeds to control fungi growth. Clough does not teach the invention of treating onion plants and/or their seeds with the auxin and metal mixture. It would have been obvious to do this since an onion plant is a monocot plant. With respect to encapsulation, it is well known to encapsulate compounds in order to control their release. Clough teaches the encapsulation of fungicides (column 9 lines 45-46). Note, Himel et al. teach the encapsulation of actives using polymers to control their release (abstract, column 2 lines 44-50). It would have been obvious to use the polymer taught by Himel et al. in the microencapsulation taught by Clough to control the release of the actives, insecticides and fungicides.

Response to Applicant's argument

Applicants point out that claims 1,28,33,54 are amended to recite: A method of … principal fungi-inhibitor consisting of at least one plant hormone including a synthetic auxin or auxin. The Examiner argues that such language is not close to the other active (metal complex compound of formula I) disclose in Clough. The language is being interpreted by the Examiner to mean that the principal inhibitor must contain at least one plant hormone. This statement does not mean that the principal inhibitor can not contain other actives such as the metal complex compound of formula I described in Clough.

Applicants point out that claim 25 is amended to recite, "A method of … principal fungi-inhibitor being at least on plant hormone … plant tissues." Claim 51 is amended to recite, "A method of … insect-inhibitor being at least on plant hormone … plant tissues." Claim 60 and 68 still employs "comprising" language. The Examiner argues that based on the description of claims 25,51,60 and 68 above the claims are open to active, metal complex compound of formula I, disclosed in Clough. Applicants further point out that the claims recite auxin as the principal inhibitor, whereas the auxin in Clough is not disclosed as the principal inhibitor. Applicants argue that independent claims 33 and 51 recite a method step of "applying an insect-inhibitor which is an auxin. Clough does not teach or suggest that an auxin protects plants from insects. Clough teaches away, because an artisan in light of Clough would not apply an auxin as an insect inhibitor, but would rather one of the suitable insecticides disclose in Clough. The Examiner argues that Clough teaches the use of auxins with triazolylalkanetriols. Therefore, the auxin should automatically function in Clough and instant claims in the same way. Note, Applicants do not demonstrate that the function of the auxin is dependent on the concentration of the auxin. For this reason, a statement to the auxin being the principal inhibitor has no patentable significance. With respect to auxin application rate ranges and metal concentration ranges recited in dependent claims, Clough is silent to auxin application rate ranges as well as metal concentration ranges. For this reason, it would have been expected that any application rate of auxin and any metal concentration range would have been effective when combined with triazolylalkanetriols absent a showing of unexpected results for the claimed auxin application rates and metal

concentration ranges. The Applicants argues that Clough teaches the use of hazardous compounds such as triazolylalkanetriols, whereas instant invention avoids the use of hazardous chemicals. Clough does not teach or suggest the substitution of hazardous triazolylalkanetriol compounds by instant environmentally friendly auxins. The Examiner reiterates that claims employ "comprising" language which allows for the inclusion of additional method steps such as a step of adding said hazardous chemicals (triazolylalkanetriols) like those disclosed in Clough. The Examiner further argues that amended claims do not avoid the use of the triazolylalkanetriols compounds taught by Clough. Note, instant claim language recites, "an aqueous solution including a fungi-inhibiting component consisting of". The "including" language makes the invention open to the ingredients disclosed in Clough. Therefore, triazolylalkanetriols taught by Clough can be added to the instant invention. Also note, Clough at column 10 lines 19 -26 teaches that compositions disclosed therein can be prepared in the form of an aqueous homogeneous preparation.

The Applicants argue the Clough does not disclose or suggest that auxins can be used as the active for inhibiting fungi and insects (larvae thereof) attack. The Examiner argues that a suggested aspect of Clough's invention involves the application of a composition containing auxins to plants (see column 9 lines 3-19 and column 11 lines 7-39). This scenario of Clough's invention embraces the same active step of the instant invention, i.e. the application of the composition comprising an auxin to plants. Since Clough shares the same active step recited in the instant claims, it is automatic that

both inventions would yield the same result, i.e. the protection of the plants from fungi and insects (larvae thereof) attack or infestation.

Applicant argues that neither the Clough patent nor the Drake and Eden patents, discloses/suggests the claimed use of an auxin as a means for controlling the infestation of fungi and insects and their larvae on plants. Clough does not teach/suggest the use of auxins together with micronutrients to protect plants from attack by fungi and insects and their larvae in the absence of triazole and imidazole compounds. The Examiner reiterates that Clough suggests that to his composition can be added other ingredients such as indoleacetic acid (auxin), indole butyric acid (auxin) and calcium carbonate (alkaline metal source). See column 9 lines 3-19 and column 11 lines 7-39. Clough teaches that the composition can be applied to plants in order to control fungi growth (column 6 line 19 - column 7 line 64). While it is true that Clough does not exemplify a composition comprising indole acetic acid or indole butyric acid plus calcium carbonate and the composition's application to plants, Clough does suggest the combination of ingredients and its application to plants; thus, the suggestion makes obvious the instant invention. A reference is not required to provide all composition and application method scenarios to render an invention obvious. It is reiterated that instant claims employ "comprising" language which allows for the inclusion of additional method steps such as a step of adding a hazardous chemical like those disclosed in Clough.

Claims 1,5,8-13,16-18,20,21,25-27,33-35,37-43,45,47-54,59-61,63,64,66-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fashui et al (95102367.5;

3/22/95), Xianguo et al. (02117261.7; 1/22/03) or Winston et al (WO 9400986; 1/20/94) and Himel et al. (US 4286020; 8/25/81) .

Fashui et al. teach a composite containing of a calcium compound and indolebutyric acid. Fashui et al. teach a method of applying the composite as a seed dressing for wheat and corn crop (abstract).

Xianguo et al. teach a composition containing indolebutyric acid. Xianguo et al. teach calcium dodecylbenzene sulfonate (page 6 of the English translation) can be added to the composition. Xianguo et al. teach a method of applying the composition to crop seed (abstract, claims 1 and 6).

Winston et al. teach a composition containing indolebutyric acid (page 7 lines 16-21). Winston et al. teach calcium carbonate (page 8 lines 21-28). Winston et al. teach a method of applying the composition to crop seed or roots (abstract, claims 1 and 6).

None of the cited references exemplify an invention specifically comprising indolebutyric acid and a metal compound such as a calcium compound, the instant calcium concentration, the application rate of auxin or the control of insects or fungi. None of the references teach the encapsulation of agricultural actives. Himel et al. teach the encapsulation of agricultural actives using polymers to control their release (abstract, column 2 lines 44-50). It would have been obvious to one having ordinary skill in the art to arrive at an invention comprising indolebutyric acid and a calcium compound. One would have been motivated to do this since the references suggest the combination. It is obvious that the combination would have been effective at controlling insects and fungi since both the prior art and instant claims disclose the same active

step, i.e. treating plant seeds or roots with a formulation comprising indolebutyric acid and the calcium compound. With respect to auxin application rate ranges and metal concentration ranges recited in dependent claims, the references do not disclose the instant auxin application rate ranges as well as metal concentration ranges. For this reason, it would have been expected that any application rate of auxin and any metal concentration range would have been effective when combined with triazolylalkanetriols absent a showing of unexpected results for the claimed auxin application rates and metal concentration ranges.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 6/18/10 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Telephonic Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALTON N. PRYOR whose telephone number is (571)272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alton N. Pryor/
Primary Examiner, Art Unit 1616